

DEVAL L. PATRICK Governor

# COMMONWEALTH OF MASSACHUSETTS EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS

DEPARTMENT OF ENVIRONMENTAL PROTECTION Central Regional Office, 627 Main Street, Worcester, MA 01608

> IAN A. BOWLES Secretary

ARLEEN O'DONNELL Commissioner

TIMOTHY P. MURRAY Lieutenant Governor

# **FINAL** AIR QUALITY OPERATING PERMIT

Issued by the Massachusetts Department of Environmental Protection ("The Department") pursuant to its authority under M.G.L. c. 111, §142B and §142D, 310 CMR 7.00 et seq., and in accordance with the provisions of 310 CMR 7.00: Appendix C.

ISSUED TO ["the Permittee"]: El Paso Corporation	INFORMATION RELIED UPON:
P.O. Box 2511 Houston, TX 77252-2511	Transmittal No. W058911
FACILITY LOCATION: Tennessee Gas Pipeline Station 264 196 Carpenter Hill Road Charlton, MA 01507	FACILITY IDENTIFYING NUMBERS: SSEIS ID NO. 118-0591 FMF FAC NO. 204912 FMF RO NO. 194057
NATURE OF BUSINESS: Natural Gas Supplier	STANDARD INDUSTRIAL CODE (SIC): 4922
RESPONSIBLE OFFICIAL:	FACILITY CONTACT PERSON:
Name: Dan B. Martin Title: Sr. Vice President of Operations	Name: Stephen Morawski Title: Principal Environmental Scientist Phone: (860) 763-6012
This operating permit shall expire on May 2, 2012	2.
For the Department of Environmental Protection, Bu	reau of Waste Prevention
Permit Chief, Bureau of Waste Prevention	Date

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### SPECIAL CONDITIONS FOR OPERATING PERMIT

A Legend to Abbreviated Terms found in the following Tables is located in Section 28 of the Operating Permit.

#### 1. PERMITTED ACTIVITIES

In accordance with the provisions of 310 CMR 7.00:Appendix C and applicable rules and regulations, the Permittee is authorized to operate air emission units as shown in Table 1 and exempt, and insignificant activities as described in 310 CMR 7.00:Appendix C(5)(h) and (i). The units described in Table 1 are subject to the terms and conditions shown in Sections 4, 5, and 6 and to other terms and conditions as specified in this permit. Emissions from the exempt activities shall be included in the total facility emissions for the emission-based portion of the fee calculation described in 310 CMR 4.00 and this permit.

#### **DESCRIPTION OF FACILITY AND OPERATIONS**

This facility is Tennessee Gas Pipeline Station 264, located in Charlton, Massachusetts. It is used to assist the flow of natural gas in a major pipeline.

The natural gas in the pipeline flows at high pressure. When an increase in demand causes the pressure to go down, one or more of the compressors is started. The compressors burn a small portion of the natural gas as fuel to power the compressors. The compressors return the natural gas to the pipeline at a higher pressure.

The exhaust gas from the compressors contains regulated air pollutants.

Table 1 lists the equipment (emission units or EUs) subject to this Operating Permit. Table 2 describes the exempt activities that are not mentioned further in the Operating Permit. Tables 3, 4, 5, and 6 describe the applicable requirements that the EUs are subject to in the Operating Permit.

## 2. EMISSION UNIT IDENTIFICATION

The following emission units (Table 1) are subject to and regulated by this operating permit:

		Table 1	
EU#	DESCRIPTION OF EMISSION UNIT		POLLUTION CONTROL DEVICE
1	4,400 HP (@ISO) Allison Gas Fired Turbine Compressor	53,760,000 BTU/hour @32 degrees Fahrenheit	N/A
2	1,300 HP (@ISO) Solar Saturn T1300 Gas Fired Turbine Compressor	16,680,000 BTU/hour @32 degrees Fahrenheit	N/A
3	1,300 HP (@ISO) Solar Saturn T1300 Gas Fired Turbine Compressor	16,680,000 BTU/hour @32 degrees Fahrenheit	N/A
41	,	60,800,000 BTU/hour @ 0 °F 58,200,000 BTU/hour @ 40 °F	Low NOx combustors
5 <sup>1</sup>	6,036 HP (@ 40 °F) Solar Centaur 50-6200LS Gas Fired Turbine Compressor		Low NOx combustors

1. EU 4 and 5 have been approved to replace EU 1, but have not yet been installed.

# 3. <u>IDENTIFICATION OF EXEMPT ACTIVITIES</u>

The following are considered exempt activities in accordance with the criteria contained in 310 CMR 7.00: Appendix C(5)(h):

Table 2	
Description of Current Exempt Activities	Reason
The list of current exempt activities is contained in the Operating Permit application and shall be updated by the Permittee to reflect changes at the facility over the permit term. An up-to-date copy of exempt activities list shall be kept on-site at the facility and a copy shall be submitted to the Department's Regional Office. Emissions from these activities shall be reported on the annual emissions statement pursuant to 310 CMR 7.12.	310 CMR 7.00:Appendix C(5)(h)

### 4. APPLICABLE REQUIREMENTS

### A. EMISSION LIMITS AND RESTRICTIONS

The permittee is subject to the emission limits/restrictions as contained in Table 3 below:

	Table 3				
EU#	Fuel or Raw Material	Pollutant	Emission Limit/Standard (See Notes 1, 2, 5, 6 and 7 Below)	Restrictions	Applicable Regulation and/or (Approval No.)
1	Natural Gas	VOC	0.03 lb/MMBtu 1.0 lb/hr 4.4 TPY		Approval #C-B-90-014 dated 8/9/90
		СО	100 ppmvd @15% O <sub>2</sub> 0.13 lb/MMBtu 5.3 lb/hr 23.0 TPY		310 CMR 7.19(7)(a)2 Approval #C-B-90-014 ECP Approval #133182 dated 11/15/96
		PM	0.02 lb/MMBtu 0.61 lb/hr 2.7 TPY		Approval #C-B-90-014
		NOx	65 ppmvd @15% O <sub>2</sub> 6.9 lb/hr	Permittee shall purchase NOx emission credits for the difference between NOx RACT limit of 65 ppm and the actual NOx emission rate.	310 CMR 7.19(7)2 ECP Approval #133182
		SO <sub>2</sub>	0.06 lb/MMBtu 2.5 lb/hr 10.8 TPY		Approval #C-B-90-014
		Opacity	20%³		310 CMR 7.06

	Table 3				
EU#	Fuel or Raw Material	Pollutant	Emission Limit/Standard (See Notes 1, 2, 5, 6 and 7 Below)	Restrictions	Applicable Regulation and/or (Approval No.)
		Smoke	#1 Ringelmann <sup>4</sup>		310 CMR 7.06
2	Natural Gas	VOC	0.03 lb/MMBtu 0.45 lb/hr 2.0 TPY		Approval #C-B-90-014
		СО	0.38 lb/MMBtu 5.4 lb/hr 24 TPY		Approval #C-B-90-014
		PM	0.01 lb/MMBtu 0.21 lb/hr 0.9 TPY		Approval #C-B-90-014
		NOx	0.31 lb/MMBtu 4.5 lb/hr 20 TPY 80 ppmvd @15% O <sub>2</sub>		Approval #C-B-90-014
			150 ppm NO <sub>2</sub> @15% O <sub>2</sub>		40 CFR 60 Subpart GG
		SO <sub>2</sub>	0.06 lb/MMBtu 0.88 lb/hr 3.9 TPY	0.8 weight % sulfur in fuel	Approval #C-B-90-014 40 CFR 60 Subpart GG
		Opacity	20% <sup>3</sup>		310 CMR 7.06
		Smoke	#1 Ringelmann⁴		310 CMR 7.06
3	Natural Gas	VOC	0.03 lb/MMBtu 0.45 lb/hr 2.0 TPY		Approval #C-B-90-014
		СО	0.38 lb/MMBtu 5.4 lb/hr 24 TPY		Approval #C-B-90-014
		PM	0.01 lb/MMBtu 0.21 lb/hr 0.9 TPY		Approval #C-B-90-014
		NOx	0.31 lb/MMBtu 4.5 lb/hr 20 TPY 80 ppmvd @15% O <sub>2</sub>		Approval #C-B-90-014
		SO <sub>2</sub>	150 ppm NO <sub>2</sub> @15% O <sub>2</sub> 0.06 lb/MMBtu  0.88 lb/hr  3.9 TPY	0.8 weight % sulfur in fuel	Approval #C-B-90-014 40 CFR 60 Subpart GG
		Opacity	20% <sup>3</sup>		310 CMR 7.06
		Smoke	#1 Ringelmann <sup>4</sup>		310 CMR 7.06
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	Table 3					
EU#	Fuel or Raw Material	Pollutant	Emission Limit/Standard (See Notes 1, 2, 5, 6 and 7 Below)	Restrictions	Applicable Regulation and/or (Approval No.)	
4, 5	Natural Gas	VOC	1.87 lb/hr (each turbine) 0.98 TPM and 8.4 TPY	1) The only fuel shall be natural gas <sup>7</sup> at a maximum rate of 60,800 cubic feet per hour per EU. 2) Fuel usage shall not	Tr #W065335 dated January 25, 2006	
		СО	3.27 lb/hr (each turbine) 2.71 TPM and 15.7 TPY (each turbine)	exceed 45 million cubic feet ("MMCF") per month and 533 MMCF per 12 month rolling total per EU.	Tr #W065335 dated January 25, 2006	
		PM	0.40 lb/hr (each turbine) 0.14 TPM and 1.7 TPY	3) The Permittee shall not operate each unit more than 300 hours per twelve month rolling total during extreme conditions.   5%O <sub>2</sub> 4) During extreme conditions the Permittee shall comply with the conditions of Table 8.	Tr #W065335 dated January 25, 2006	
		NOx	0.053 lb/MMBtu 3.22 lb/hr (each turbine)		Tr #W065335 dated January 25, 2006	
			25 ppm @ 15% O2		NSPS Subpart KKKK	
		SO <sub>2</sub>	SO <sub>2</sub>	0.0006 lb/MMBtu 0.21 lb/hr (each turbine) 0.08 TPM and 0.9 TPY (each turbine)		Tr #W065335 dated January 25, 2006
			0.06 lb/MMBtu		NSPS Subpart KKKK	
		HAPs	0.003 lb/MMBtu 0.19 lb/hr (each turbine) 0.07 TPM and 0.8 TPY (each turbine)		Tr #W065335 dated January 25, 2006	
		Visible Emission s	Smoke or Opacity shall not exceed 10% at any time of operation including start-ups and shut downs.		Tr #W065335 dated January 25, 2006	

- 1. The averaging period for all lb/MMBtu and lb/hr limits shall be one hour.
- 2. TPY signifies tons per twelve-month rolling total.
- 3. Not to exceed 20% for a period or aggregate period in excess of 2 minutes during any one hour provided that at no time during the one hour shall the opacity exceed 40%.
- 4. Not to exceed # 1 of the Chart for a period or aggregate period of time in excess of 6 minutes during any one hour provided that at no time shall the shade, density or appearance be greater than No. 2 of the Chart.
- 5. For EUs 4 and 5, typical conditions are defined as ambient temperatures at or above 0°F (-18°C).
- 6. For EUs 4 and 5, emission rate in lb/hr is for above 0°F (-18 °C) and site conditions of 728 feet elevation, one atmosphere pressure, 60% relative humidity. Emission rate in tons per month and tons

per year corresponds to the annual average temperature of above 40 °F (4 °C) and site conditions of 728 feet elevation, one atmosphere pressure, 60% relative humidity and includes 300 hours of operation under extreme conditions.

- 7. Natural Gas as defined in 40 CFR 60, Subpart GG, standards of performance for stationary gas turbines, final rule amended, July 8, 2004 and Section XI, Provision N. Definitions.
- 8. Extreme conditions are defined as ambient temperature below 0°F (-18°C).

#### **B. COMPLIANCE DEMONSTRATION**

The permittee is subject to the monitoring/testing, record keeping, and reporting requirements as contained in Tables 4, 5, and 6 below and 310 CMR 7.00 Appendix C (9) and (10) and applicable requirements contained in Table 3:

	Table 4		
EU#	MONITORING/TESTING REQUIREMENTS		
	1) The Permittee shall demonstrate that the fuel burned meets the definition of natural gas in 40 CFR § 60.331(u), in accordance with 40 CFR § 60.334(h)(3).		
	2) The Permittee shall maintain automatic meters and records (date and time each unit is operating) of the engine HP-HRS to identify operating status of the gas turbines at all times, in accordance with Approval #C-B-90-014 and Tr #W065335.		
	3) Smoke and opacity limits shall be determined in accordance with EPA Method 9, as specified in 40 CFR 60, Appendix A in accordance with 310 CMR 7.00 Appendix C(9)(b).		
	4) The Permittee shall inspect and maintain the emission units in accordance with the manufacturers recommendations and tested for efficient operation at least once each calendar year in accordance with 310 CMR 7.04(4)(a). The permittee may use alternate procedures if the manufacturer's recommendations are no longer pertinent or experience indicates that an alternate procedure is more effective.		
	5) Emission Testing to demonstrate compliance with the Emission Limits specified in Table 3 shall be in accordance with EPA approved reference test methods unless otherwise approved by EPA and the Department or unless otherwise specified and shall include test Methods 1 through 4 and for Particulate Matter (Method 5), Sulfur Dioxide (Method 6C), Nitrogen Oxides (Method 7E), Carbon Monoxide (Method 10). Methods 19 and 20 are an acceptable alternative for the above methods.		
	6) The Permittee shall calculate the amount of NOx emissions from this EU in order to determine the amount of NOx emission credits that must be used to cover the difference between actual and allowable NOx emissions, in accordance with ECP Approval #133182.		
4, 5	7) Within 180 days of commencing operation of EU #4 and EU #5, the Permittee shall demonstrate compliance with the NO <sub>x</sub> , CO, and VOC emission limitations contained in Table 3 of this Approval. Operation shall commence after final acceptance from the manufacturer. Compliance with emission limitations set forth in Table 3 shall be determined based on one-hour averages. All applicable emission limitations are referenced to 15 percent oxygen and ISO conditions. No testing will be required during startup, shutdown or extreme conditions. Extreme conditions are defined as when ambient temperature is below 0 °F (-18°C).		
	8) At least 30 days prior to commencing the stack testing required by condition 7) in Table 4 of this Operating Permit, the Permittee shall submit:		
	A. A complete test protocol describing sampling point locations, sampling equipment, analytical procedures, and the operating conditions during the testing.		
	B. A proposed plan for demonstrating continuous compliance for NOx using annual		

	Table 4		
EU#	MONITORING/TESTING REQUIREMENTS		
	performance tests or continuous monitoring systems in accordance with 40 CFR 60.4340.		
	9) Compliance with the allowable opacity limits shall be determined in accordance with EPA method 9, as specified in 40 CFR 60, Appendix A.		
	10) The Permittee shall monitor the operations of the entire facility such that necessary information is available for the preparation of the annual Source Registration/Emission Statement Forms as required by 310 CMR 7.12.		
	11) The Permittee shall conduct stack testing when the Department has determined that such stack testing is necessary to ascertain compliance with the Department's regulations or design approval provisos, in accordance with 310 CMR 7.13(1). Such stack testing shall be:  (a) conducted by a person knowledgeable in stack testing, and  (b) conducted in accordance with procedures contained in a test protocol which has been approved by the Department, and  (c) in the presence of a representative of the Department when such is deemed necessary.		

	Table 5				
EU#	RECORD KEEPING REQUIREMENTS				
	1) The Permittee shall maintain on site the following records for five (5) years from the date of generation and have the records readily available to the Department and EPA personnel in accordance with 310 CMR 7.00 Appendix C(10)(b):				
	a) <b>Fuel testing data</b> , including what test was performed, the results of said testing, the date and time of the testing, where the fuel sample that was tested was taken from and who performed the testing in order to demonstrate that the fuel burned meets the definition of natural gas in US 40 CFR § 60.331(u);				
	b) Inspection, maintenance, and testing results of the emission unit and the date upon which it was performed in accordance with 310 CMR 7.04(4)(a);				
	c) records of emissions testing conducted and visual smoke/opacity observations to demonstrate compliance with the applicable requirements in Table 3 in accordance with 310 CMR 7.13(1)(d).				
1	d) records of calculations of NOx emissions from EU 1 and NOx emission credit use, in accordance with ECP Approval #133182.				
4, 5	2) In accordance with Approval #W065335, a record keeping system shall be established and continued on site by the Permittee. All records shall be maintained up-to-date such that twelve-month rolling period information is readily available for Department examination. Records shall be kept onsite. If onsite storage is not available and records are tracked through a central data management system, the Permittee shall provide the requested information within 48 hours of receiving such a request. Record keeping for EU #4 and EU #5 shall, at a minimum, include:				
	Records of the hours of operation of each unit, including number of start-ups and shutdowns, operations during extreme conditions, hourly fuel consumption and horsepower delivered;				
	<ul> <li>b) The quantity of natural gas combusted within each turbine during each calendar month;</li> <li>c) The actual emissions of NO<sub>x</sub>, CO, SO<sub>2</sub>, PM, and VOCs during each calendar month and the previous rolling 12 calendar month period.</li> </ul>				
	d) Maintenance: A record of routine maintenance activities performed on the EUs and				

monitoring equipment including, at a minimum, the type or a description of the maintenance performed and the date and time the work was completed.  e) Malfunctions: A record of all malfunctions on the EUs and monitoring equipment including, at a minimum: the date and time the malfunction occurred; a description of the malfunction and the corrective action taken; the date and time corrective actions were initiated; and the date and time corrective actions were completed and the emission unit returned to compliance.
All records shall be kept on site for five (5) years and shall be made available to the Department upon request.
3) Records of emissions testing conducted to demonstrate compliance with the applicable requirements in Table 3 shall be maintained in accordance with 310 CMR 7.13(1)(d).
4) The Permittee shall maintain sufficient records of its operations and monitoring information for the annual preparation of a Source Registration/Emission Statement Form as required by 310 CMR 7.12.
5) The Permittee shall keep copies of the Source Registration/Emission Statement Forms submitted to the Department for five (5) years as required per 310 CMR 7.12(3)(b).

Facility Wide

	Table 6			
EU#	REPORTING REQUIREMENTS			
1, 2, 3, 4,5	1) The Permittee shall submit fuel sulfur content test results, obtained from the fuel supplier and or requisite analyses, to the Department upon request, in accordance with 310 CMR 7.00, Appendix C.			
	2) The Permittee shall summarize and submit to the Department the results of stack testing as prescribed in the Department's approved pretest protocol stack testing that was determined by the Department to be necessary to ascertain compliance with Department's regulations or design approval provisos in accordance with 310 CMR 7.13(1) and 310 CMR 7.13(2).			
	3) Upon the Department's request, any records required by the applicable requirements identified in Section 4 of the operating permit, or the emissions of any air contaminant from the facility, shall be submitted to the Department within 30 days of the request by the Department, or within a longer time period if approved in writing by the Department. Said response shall be transmitted on paper, on computer disk, or electronically at the discretion of the Department, pursuant to 310 CMR 7.00 Appendix C(10)(a) incorporated herein by reference.			
	4) In accordance with ECP Approval #133182, the Permittee shall submit quarterly progress reports including the following:  Design plans/relevant technological development, actual emissions, purchase and use of emissions reduction credits (actual emission, escrow and credit remaining; and including calculations, monthly compressor operating summaries, and daily/monthly fuel use.			
	5) In accordance with Approval #W065335, The Permittee shall inform the Department within 30 days of the removal of the Allison 50K13 gas turbine compressor from the site.			
2, 3, 4, 5	6) In accordance with Approval #W065335, the Permittee shall notify the Department in writing			

- 90 days prior to any planned or routine construction, substantial reconstruction, alteration or replacement of EU 2, EU 3, EU 4, and EU 5, including, but not limited to, any service life overhaul; and
- 7) If any construction, substantial reconstruction, alteration, or replacement of EU 2, EU 3, EU 4, and EU 5, is needed due to malfunction, upset conditions, or premature degradation, the Permittee shall notify the CERO by phone or fax within 24 hours after the occurrence of said conditions. The Permittee shall submit a detailed written description to the Department of the actions taken within five days after completing such actions.
- 4, 5 8) In accordance with Approval #W065335, The Permittee shall notify the Central Region, Bureau of Waste Prevention, Permit Chief in writing within seven days after completing the installation of EU 4 and 5; and
  - 9) The Permittee shall submit the Standard Operating and Maintenance Procedures ("SOMP") for EU 4 and EU 5 to the Department within 30 days after completing the installation. The Permittee shall submit any subsequent changes to the SOMP to the Department within seven days after commencing such changes.

#### Facility Wide

- 10) In accordance with Approval #W065335, The Regional Bureau of Waste Prevention, Compliance and Enforcement office, must be notified by telephone or fax as soon as possible (but no later than 24 hours) after the occurrence of any UPSETS or MALFUNCTIONS to the facility equipment, air pollution control equipment, or monitoring equipment which result in an excess emission to the air and/or a condition of air pollution.
- 11) The Permittee shall summarize and submit to the Department the results of stack testing as prescribed in the Department's approved pretest protocol, stack testing that was determined by the Department to be necessary to ascertain compliance with the Department's regulations or design approval provisions in accordance with 310 CMR 7.13(1) and 310 CMR 7.13(2).
- 12) In accordance with Approval #W065335, upon the Department's request, any records required by the applicable requirements identified in this permit, or the emissions of any air contaminant from the facility, shall be submitted to the Department within 30 days of the request by the Department, or within a longer time period if approved in writing by the Department. Said response shall be transmitted on paper, on computer disk, or electronically at the discretion of the Department.
- 13) The Permittee shall submit a Source Registration/Emission Statement form to the Department on an annual basis as required by 310 CMR 7.12.
- 14) The Permittee shall submit by January 30 and July 30 for the previous six months respectively, a summary of all monitoring data and related supporting information to the Department as required by 310 CMR 7.00: Appendix C(10)(c).
- 15) All required reports must be certified by a responsible official of the Permittee as provided in 310 CMR 7.00: Appendix C(10)(h).
- 16) Any construction, substantial reconstruction or alteration, as described in 310 CMR 7.02, at a facility subject to a reporting requirements of 310 CMR 7.12, shall be reported to the Department on the next required source registration.

#### C. GENERAL APPLICABLE REQUIREMENTS

The permittee shall comply with all generally applicable requirements contained in 310 CMR 7.00 et. seq. and 310 CMR 8.00 et. seq., when subject.

#### D. REQUIREMENTS NOT CURRENTLY APPLICABLE

The permittee is currently not subject to the following requirements:

Table 7					
REGULATION	DESCRIPTION/REASON				
Open Burning310 CMR 7.07	No open burning conducted at this facility.				
Reduction of Single Occupant Commuter Vehicle Use310 CMR 7.16	Permittee has less than 250 employees.				
42 U.S.C. 7401, §112(d) Hazardous Air Pollutants	Emissions under the applicable thresholds.				
42 U.S.C. 7401, §112(r) Prevention of Accidental Releases	Storage, usage and processing of listed chemicals under the applicable thresholds.				
Stratospheric Ozone42 U.S.C. 7401, Title VI	No such applicable activities conducted at the facility.				
Compliance Assurance Monitoring 40 CFR Part 64	No pollution control devices at this facility.				

### 5. SPECIAL TERMS AND CONDITIONS

In accordance with Approval #W065335, the permittee is subject to the following special provisions that are not contained in Table 3, 4, 5, and 6:

A. The Permittee shall operate EU #4 and #5 in accordance with the emission limits set in Table 3 unless under extreme conditions. Extreme conditions are defined as ambient temperatures below 0°F (-18°C), in which case EU #4 and #5 will not exceed the emission rates of Table 8.

Table 8									
Emission Limits for EU#4 and EU#5 Under Extreme Conditions <sup>1</sup>									
(pounds per hour per turbine compressor)									
Temperature (°F) / (°C)	Maximum Heat Input (MMBtu/hr.) HHV	NOx	СО	VOC	SO2	РМ	HAPs		
Below 0/(-18)	62	9.2	13.3	3.8	0.04	0.41	0.19		

Note: 1 Extreme conditions are defined as ambient temperature below 0 °F (-18°C).

- B. The facility shall be designed, constructed, operated and maintained such that at all times no condition of air pollution will be caused by emissions of sound as provided in 310 CMR 7.01 and 310 CMR 7.10.
- C. The Permittee shall combust only natural gas in EU #2, EU #3, EU #4 and EU #5. Natural Gas as defined in 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, final rule amended, July 8, 2004 and Section XI, Provision N. Definitions. Accordingly, the Permittee does not have to monitor sulfur in fuel at this particular facility location.

- D. The Permittee shall allow Department personnel access to the plant site, buildings, and all pertinent records at any time for the purpose of making inspections, surveys, collecting fuel samples, and reviewing SOMP records.
- E. The Permittee shall comply with all applicable requirements of 40 CFR Part 60 Subpart KKKK.
- F. Within 90 days of installation of EU #4 and #5, the Permittee shall remove or render inoperable the existing Allison 50K13 gas turbine compressor set. This includes physically removing or disconnecting the turbine compressor set from the natural gas pipeline or its fuel supply. The Permittee shall inform the Department within 30 days of the removal of the Allison 50K13 gas turbine compressor from the site. For the purposes of this condition installation is defined as completion of all construction related activities including the initial commissioning period. Installation is complete when the new emission units are fired for the first time for the sole purpose of transporting gas in the pipeline.

Upon rendering EU # 1 as inoperable, all conditions related to EU # 1 in Tables 3, 4, 5, and 6 of this permit are no longer applicable.

### <u>6. ALTERNATIVE OPERATING SCENARIOS</u>

The permittee did not request alternative operating scenarios in its operating permit application.

### 7. EMISSIONS TRADING

(a) Intra-facility emission trading

The facility did not request intra-facility emissions trading in its operating permit application.

Pursuant to 310 CMR 7.00: Appendix C(7)(b), emission trades, provided for in this permit, may be implemented provided the Permittee notifies The United States Environmental Protection Agency (EPA) and the Department at least fifteen (15) days in advance of the proposed changes and the Permittee provides the information required in 310 CMR 7.00: Appendix C(7)(b)3.

Any intra-facility change that does not qualify pursuant to 310 CMR 7.00: Appendix C(7)(b)2 is required to be submitted to the Department pursuant to 310 CMR 7.00: Appendix B.

(b) Inter-facility emission trading

The Permittee did not request inter-facility emissions trading in its operating permit application.

All increases in emissions due to emission trading, must be authorized under the applicable requirements of 310 CMR 7.00: Appendix B (the "Emissions Trading Program") and the 42 U.S.C. §7401 et seq. (the "Act"), and provided for in this permit.

#### 8. COMPLIANCE SCHEDULE

The Permittee has indicated that the facility is in compliance and shall remain in compliance with the applicable requirements contained in Sections 4 and 5.

In addition, the Permittee shall comply with any applicable requirements that become effective during the permit term.

### GENERAL CONDITIONS FOR OPERATING PERMIT

### **9. FEES**

The permittee has paid the permit application processing fee and shall pay the annual compliance fee in accordance with the fee schedule pursuant to 310 CMR 4.00.

#### 10. COMPLIANCE CERTIFICATION

All documents submitted to the Department shall contain certification by the responsible official of truth, accuracy, and completeness. Such certification shall be in compliance with 310 CMR 7.01(2) and contain the following language:

"I certify that I have personally examined the foregoing and am familiar with the information contained in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment."

The "Operating Permit Reporting Kit" contains instructions and the Annual Compliance Report and Certification and the Semi-Annual Monitoring Summary Report and Certification. The "Operating Permit Reporting Kit" is available to the Permittee via the Department's web site, <a href="http://www.mass.gov/dep/air/approvals/aqforms.htm">http://www.mass.gov/dep/air/approvals/aqforms.htm</a>.

#### (a) Annual Compliance Report and Certification

The Responsible Official shall certify, annually for the calendar year, that the facility is in compliance with the requirements of this permit. The report shall be postmarked or delivered by January 30 to the Department and to the Regional Administrator, U.S. Environmental Protection Agency - New England Region. The report shall be submitted in compliance with the submission requirements below.

The compliance certification and report shall describe:

- i. the terms and conditions of the permit that are the basis of the certification;
- ii. the current compliance status and whether compliance was continuous or intermittent during the reporting period;
- iii. the methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods; and
- iv. any additional information required by the Department to determine the compliance status of the source.

The Responsible Official shall certify, semi-annually on the calendar year, that the facility is in compliance with the requirements of this permit. The report shall be postmarked or delivered by January 30 and July 30 to the Department. The report shall be submitted in compliance with the submission requirements below.

The compliance certification and report shall describe:

- i. the terms and conditions of the permit that are the basis of the certification;
- ii. the current compliance status during the reporting period;
- iii. the methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods;
- iv. whether there were any deviations during the reporting period;
- v. if there are any outstanding deviations at the time of reporting, and the Corrective Action Plan to remedy said deviation;
- vi. whether deviations in the reporting period were previously reported;
- vii. if there are any outstanding deviations at the time of reporting, the proposed date of return to compliance;
- viii. if the deviations in the reporting period have returned to compliance and date of such return to compliance; and
- ix. any additional information required by the Department to determine the compliance status of the source.

#### 11. NONCOMPLIANCE

Any noncompliance with a permit condition constitutes a violation of 310 CMR 7.00: Appendix C and the Clean Air Act, and is grounds for enforcement action, for permit termination or revocation, or for denial of an operating permit renewal application by the Department and/or EPA. Noncompliance may also be grounds for assessment of administrative or civil penalties under M.G.L. c.21A, §16 and 310 CMR 5.00; and civil penalties under M.G.L. c.111, §142A and 142B. This permit does not relieve the permittee from the obligation to comply with any other provisions of 310 CMR 7.00 or the Act, or to obtain any other necessary authorizations from other governmental agencies, or to comply with all other applicable Federal, State, or Local rules and regulations, not addressed in this permit.

## 12. PERMIT SHIELD

(a) This facility has a permit shield provided that it operates in compliance with the terms and conditions of this permit. Compliance with the terms and conditions of this permit shall be deemed compliance with all applicable requirements specifically identified in Sections 4, 5, 6, and 7, for the emission units as described in the permittee's application and as identified in this permit.

Where there is a conflict between the terms and conditions of this permit and any earlier approval or permit, the terms and conditions of this permit control.

- (b) The Department has determined that the permittee is not currently subject to the requirements listed in Section 4, Table 7.
- (c) Nothing in this permit shall alter or affect the following:
  - (i) the liability of the source for any violation of applicable requirements prior to or at the time of permit issuance.
  - (ii) the applicable requirements of the Acid Rain Program, consistent with 42 U.S.C. §7401, §408(a); or
  - (iii) the ability of EPA to obtain information under 42 U.S.C. §7401, §114 or §303 of the Act.

#### 13. ENFORCEMENT

The following regulations found at 310 CMR 7.02(8)(h) Table 6 for wood fuel, 7.02(8)(i), 7.04(9), 7.05(8), 7.09 (odor), 7.10 (noise), 7.18(1)(b), 7.21, 7.22 and any condition(s) designated as "state only" are not federally enforceable because they are not required under the Act or under any of its applicable requirements. These regulations and conditions are not enforceable by the EPA. Citizens may seek equitable or declaratory relief to enforce these regulations and conditions pursuant to Massachusetts General Law Chapter 214, Section 7A

All other terms and conditions contained in this permit, including any provisions designed to limit a facility's potential to emit, are enforceable by the Department, EPA and citizens as defined under the Act.

A Permittee shall not claim as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

#### 14. PERMIT TERM

This permit shall expire on the date specified on the cover page of this permit, which shall not be later than the date 5 years after issuance of this permit.

Permit expiration terminates the permittee's right to operate the facility's emission units, control equipment or associated equipment covered by this permit, unless a timely and complete renewal application is submitted at least 6 months before the expiration date.

### 15. PERMIT RENEWAL

Upon the Department's receipt of a complete and timely application for renewal, this facility may continue to operate subject to final action by the Department on the renewal application.

In the event the Department has not taken final action on the operating permit renewal application prior to this permit's expiration date, this permit shall remain in effect until the Department takes final action on the renewal application, provided that a timely and complete renewal application has been submitted in accordance with 310 CMR 7.00: Appendix C(13).

### 16. REOPENING FOR CAUSE

This permit may be modified, revoked, reopened, and reissued, or terminated for cause by the Department and/or EPA. The responsible official of the facility may request that the Department terminate the facility's operating permit for cause. The Department will reopen and amend this permit in accordance with the conditions and procedures under 310 CMR 7.00: Appendix C(14).

The filing of a request by the permittee for an operating permit revision, revocation and reissuance, or termination, or a notification of a planned change or anticipated noncompliance does not stay any operating permit condition.

## 17. DUTY TO PROVIDE INFORMATION

Upon the Department's written request, the permittee shall furnish, within a reasonable time, any information necessary for determining whether cause exists for modifying, revoking and reissuing, or

terminating the permit, or to determine compliance with the permit. Upon request, the permittee shall furnish to the Department copies of records that the permittee is required to retain by this permit.

#### 18. DUTY TO SUPPLEMENT

The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information. The permittee shall also provide additional information as necessary to address any requirements that become applicable to the facility after the date a complete renewal application was submitted but prior to release of a draft permit.

The permittee shall promptly, on discovery, report to the Department a material error or omission in any records, reports, plans, or other documents previously provided to the Department.

#### 19. TRANSFER OF OWNERSHIP OR OPERATION

This permit is not transferable by the permittee unless done in accordance with 310 CMR 7.00: Appendix C(8)(a). A change in ownership or operation control is considered an administrative permit amendment if no other change in the permit is necessary and provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between current and new permittee, has been submitted to the Department.

#### **20. PROPERTY RIGHTS**

This permit does not convey any property rights of any sort, or any exclusive privilege.

#### 21. INSPECTION AND ENTRY

Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized representatives of the Department, and EPA to perform the following:

- (a) enter upon the permittee's premises where an operating permit source activity is located or emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- (d) Sample or monitor at reasonable times any substances or parameters for the purpose of assuring compliance with the operating permit or applicable requirements as per 310 CMR 7.00 Appendix C(3)(g)(12).

### 22. PERMIT AVAILABILITY

The permittee shall have available at the facility, at all times, a copy of the materials listed under 310 CMR 7.00: Appendix C(10)(e) and shall provide a copy of the permit, including any amendments or attachments thereto, upon request by the Department or EPA.

#### 23. SEVERABILITY CLAUSE

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

#### **24.** EMERGENCY CONDITIONS

The permittee shall be shielded from enforcement action brought for noncompliance with technology based emission limitations specified in this permit as a result of an emergency. In order to use emergency as an affirmative defense to an action brought for noncompliance, the permittee shall demonstrate the affirmative defense through properly signed, contemporaneous operating logs, or other relevant evidence that:

- (a) an emergency occurred and that the permittee can identify the cause(s) of the emergency;
- (b) the permitted facility was at the time being properly operated;
- (c) during the period of the emergency, the permittee took all reasonable steps as expeditiously as possible, to minimize levels of emissions that exceeded the emissions standards, or other requirements in this permit; and
- (d) the permittee submitted notice of the emergency to the Department within two (2) business days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emission, and corrective actions taken.

If an emergency episode requires immediate notification to the Bureau of Waste Site Cleanup/Emergency Response immediate notification to the appropriate parties should be made as required by law.

### 25. PERMIT DEVIATION

Deviations are instances where any permit condition is violated and not reported as an emergency pursuant to section 24 of this permit. Reporting a permit deviation is not an affirmative defense for action brought for noncompliance. Any reporting requirements listed in Table 6. of this Operating Permit shall supercede the following deviation reporting requirements, if applicable.

The Permittee shall report to the Department's Regional Bureau of Waste Prevention the following deviations from permit requirements, by telephone or fax, within three (3) days of discovery of such deviation:

• Unpermitted pollutant releases, excess emissions or opacity exceedances measured directly by CEMS/COMS, by EPA reference methods or by other credible evidence, which are ten percent

<sup>&</sup>lt;sup>1</sup> Technology based emission limits are those established on the basis of emission reductions achievable with various control measures or process changes (e.g., a new source performance standard) rather than those established to attain health based air quality standards.

An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation would require immediate corrective action to restore normal operation, and that causes the source to exceed a technology based limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operations, operator error or decision to keep operating despite knowledge of any of these things.

- (10%) or more above the emission limit.
- Exceedances of parameter limits established by your Operating Permit or other approvals, where the parameter limit is identified by the permit or approval as surrogate for an emission limit.
- Exceedances of permit operational limitations directly correlated to excess emissions.
- Failure to capture valid emissions or opacity monitoring data or to maintain monitoring equipment as required by statutes, regulations, your Operating Permit, or other approvals.
- Failure to perform QA/QC measures as required by your Operating Permit or other approvals for instruments that directly monitor compliance.

For all other deviations, three (3) day notification is waived and is satisfied by the documentation required in the subsequent Semi-Annual Monitoring Summary and Certification. Instructions and forms for reporting deviations are found in the Massachusetts Department of Environmental Protection Bureau of Waste Prevention Air Operating Permit Reporting Kit, which is available to the Permittee via the Department's web site, <a href="http://www.mass.gov/dep/air/approvals/aqforms.htm">http://www.mass.gov/dep/air/approvals/aqforms.htm</a>. This report shall include the deviation, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and the corrective actions or preventative measures taken.

Deviations that were reported by telephone or fax within 3 days of discovery, said deviations shall also be submitted in writing via the Operating Permit Deviation Report to the regional Bureau of Waste Prevention within ten (10) days of discovery. For deviations, which do not require 3-day verbal notification, follow-up reporting requirements are satisfied by the documentation required in the aforementioned Semi-Annual Monitoring Summary and Certification.

#### 26. OPERATIONAL FLEXIBILITY

The permittee is allowed to make changes at the facility consistent with 42 U.S.C. §7401, §502(b)(10) not specifically prohibited by the permit and in compliance with all applicable requirements provided the permittee gives the EPA and the Department written notice fifteen days prior to said change; notification is not required for exempt activities listed at 310 CMR 7.00: Appendix C(5)(i). The notice shall comply with the requirements stated at 310 CMR 7.00: Appendix C(7)(a) and will be appended to the facility's permit. The permit shield allowed for at 310 CMR 7.00: Appendix C(12) shall not apply to these changes.

### 27. MODIFICATIONS

- (a) Administrative Amendments The permittee may make changes at the facility which are considered administrative amendments pursuant to 310 CMR 7.00: Appendix C(8)(a)1., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(b).
- (b) Minor Modifications The permittee may make changes at the facility which are considered minor modifications pursuant to 310 CMR 7.00: Appendix C(8)(a)2., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(d).
- (c) Significant Modifications The permittee may make changes at the facility which are considered significant modifications pursuant to 310 CMR 7.00: Appendix C(8)(a)3., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(c).
- (d) No permit revision shall be required, under any approved economic incentives program, marketable permits program, emission trading program and other similar programs or processes, for changes that are provided in this operating permit. A revision to the permit is not required for increases in emissions that are authorized by allowances acquired pursuant to the Acid Rain Program under Title IV of the Act, provided that such increases do not require an operating permit revision under any other

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applicable requirement.

### APPEAL CONDITIONS FOR OPERATING PERMIT

This permit is an action of the Department. If you are aggrieved by this action, you may request an adjudicatory hearing within 21 days of issuance of this permit. In addition, any person who participates in any public participation process required by the Federal Clean Air Act, 42 U.S.C. §7401, §502(b)(6) or under 310 CMR 7.00: Appendix C(6), with respect to the Department's final action on operating permits governing air emissions, and who has standing to sue with respect to the matter pursuant to federal constitutional law, may initiate an adjudicatory hearing pursuant to Chapter 30A, and may obtain judicial review, pursuant to Chapter 30A, of a final decision therein.

If an adjudicatory hearing is requested, the facility must continue to comply with all existing federal and state applicable requirements to which the facility is currently subject, until a final decision is issued in the case or the appeal is withdrawn. During this period, the application shield shall remain in effect, and the facility shall not be in violation of the Act for operating without a permit.

Under 310 CMR 1.01(6)(b), the request must state clearly and concisely the facts which are the grounds for the request, and the relief sought. Additionally, the request must state why the permit is not consistent with applicable laws and regulations.

The hearing request along with a valid check payable to The Commonwealth of Massachusetts in the amount of one hundred dollars (\$100.00) must be mailed to:

The Commonwealth of Massachusetts Department of Environmental Protection P.O. Box 4062 Boston, MA 02211

The request will be dismissed if the filing fee is not paid unless the appellant is exempt or granted a waiver as described below.

The filing fee is not required if the appellant is a city or town (or municipal agency) county, or district of the Commonwealth of Massachusetts, or a municipal housing authority.

The Department may waive the adjudicatory hearing filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request as provided above, an affidavit setting forth the facts believed to support the claim of undue financial hardship.

### 28. LEGEND OF ABBREVIATED TERMS IN OPERATING PERMIT

\*Not all abbreviations are present in every Operating Permit

< - Less Than

> - Greater Than

#/hr - Pounds Per Hour

10<sup>6</sup> BTU/hr - 1,000,000 BTU Per Hour

AQCR - Air Quality Control Region

**CEM - Continuous Emission Monitor** 

CO - Carbon Monoxide

EPA - Environmental Protection Agency

FMF FAC. NO. - Facility Master File Number

FMF RO NO. - Facility Master File Regulated Object Number

FT<sup>3</sup>/day - Cubic Feet Per Day

HHV - Higher Heating Value

ISO – Represents 59° F, 60% Relative Humidity, 29.92 Inches Mercury At Sea Level

MADEP - Massachusetts Department of Environmental Protection

MMBTU/hr - Million British Thermal Units Per Hour

NH3 - Ammonia

NO<sub>x</sub> - Nitrogen Oxides

PB - Lead

PLT ID - Plant Identification

PM - Particulate Matter

PPM - Parts Per Million

ppmvd – parts per million by volume in the dry exhaust gas

PTE - Potential To Emit

SO<sub>2</sub> - Sulfur Dioxide

SSEIS - Stationary Source Emission Inventory System

TPY - Tons Per Year

VOC - Volatile Organic Compound

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